

WHAT IS CLAIMED IS:

1. A sheet processing apparatus comprising:
 - sheet holding means for holding a plurality of supplied sheets in a stack;
 - 5 first sheet stacking means on which sheets that have been held by said sheet holding means or have passed through said sheet holding means without being held are stacked and subjected to a processing;
 - second sheet stacking means, provided downstream of said first sheet stacking means with respect to a sheet conveying direction, on which sheets are to be stacked;
 - 10 first sheet conveying means for conveying said sheets stacked on said first sheet stacking means to discharge the sheets to said second sheet stacking means; and
 - 15 second sheet conveying means for conveying said sheets stacked on said first sheet stacking means toward said second sheet stacking means;
 - 20 wherein after the sheets stacked on said first sheet stacking means are conveyed by said second sheet conveying means toward said second sheet stacking means by a predetermined amount, said first sheet conveying means conveys the sheets held by said sheet holding means and the sheets stacked on said first sheet stacking means simultaneously under a state in which a downstream edge of the sheet stacked
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on said first sheet stacking means protrudes in a downstream side beyond a downstream edge of the sheets held by said sheet holding means by a predetermined amount to thereby discharge the sheets
5 stacked on said first sheet stacking means to said second sheet stacking means and to stack the sheets held by said sheet holding means onto said first sheet stacking means.

10 2. A sheet processing apparatus according to claim 1, wherein said second sheet conveying means is adapted to push a trailing edge, with respect to the sheet conveying direction, of the sheets stacked on said first sheet stacking means to thereby convey
15 those sheets.

3. A sheet processing apparatus according to claim 1 or 2, further comprising control means for controlling said second sheet conveying means in such
20 a way that said second sheet conveying means conveys the sheets stacked on said first sheet stacking means until the downstream edge of those sheets protrude in the downstream side beyond the downstream edge of the sheets held by said sheet holding means by a
25 predetermined amount.

4. A sheet processing apparatus according to

claim 3, wherein said sheet holding means has a held
sheet conveying portion for conveying said held
sheets, and said control means controls sheet
conveying speed of said held sheet conveying portion
5 and sheet conveying speed of said first sheet
conveying means in such a way as to make them equal.

5. A sheet processing apparatus according to
claim 4, wherein said control means controls
10 activation timing of said held sheet conveying
portion and said first sheet conveying means in such
a way that the sheet conveying speeds of them are
made equal when the sheets are conveyed.

15 6. A sheet processing apparatus according to
claim 3, wherein said control means controls sheet
conveying speed of said first sheet conveying means
and sheet conveying speed of said second sheet
conveying speed in such a way as to make them equal.

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7. A sheet processing apparatus according to
claim 6, wherein said control means controls
activation timing of said first sheet conveying means
and said second sheet conveying means in such a way
25 that the sheet conveying speeds of them are made
equal when the sheets are conveyed.

8. An image forming apparatus comprising:
image forming means for forming an image on a
sheet; and

a sheet processing apparatus for performing a
5 processing on a sheet on which an image has been
formed by said image forming means;

wherein said sheet processing apparatus
comprises a sheet processing apparatus according to
any one of claims 1 to 3.

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9. An image forming apparatus comprising:
image forming means for forming an image on a
sheet;

a sheet processing apparatus according to claim
15 1 or 2 for performing a processing on a sheet on
which an image has been formed by said image forming
means; and

control means for controlling said second sheet
conveying means in such a way that said second sheet
20 conveying means conveys the sheets stacked on said
first sheet stacking means until the downstream edge
of those sheets protrude in the downstream side
beyond the downstream edge of the sheets held by said
sheet holding means by a predetermined amount.

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10. An image forming apparatus according to
claim 9, wherein said sheet holding means has a held

sheet conveying portion for conveying said held
sheets, and said control means controls sheet
conveying speed of said held sheet conveying portion
and sheet conveying speed of said first sheet
5 conveying means in such a way as to make them equal.

11. An image forming apparatus according to
claim 10, wherein said control means controls
activation timing of said held sheet conveying
10 portion and said first sheet conveying means in such
a way that the sheet conveying speeds of them are
made equal when the sheets are conveyed.

12. An image forming apparatus according to
15 claim 9, wherein said control means controls sheet
conveying speed of said first sheet conveying means
and sheet conveying speed of said second sheet
conveying speed in such a way as to make them equal.

20 13. An image forming apparatus according to
claim 12, wherein said control means controls
activation timing of said first sheet conveying means
and said second sheet conveying means in such a way
that the sheet conveying speeds of them are made
25 equal when the sheets are conveyed.